FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-7332 FACILITY NAME: National Food Corporation

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-7332. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the city of Marysville POTW. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response.

GENERAL INFORMATION			
Applicant	National Food Corporation		
Facility Name and Address	National Food Corporation 16900 – 51 st Avenue NE Arlington, WA 98233		
Type of Facility	Egg Processing		
Facility Discharge Location	Latitude: 48° 08' 56" N. Longitude: 122° 09' 46" W.		
Treatment Plant Receiving Discharge	City of Marysville POTW		
Contact at Facility	Name: Dwayne Paul - Egg Products Manager Telephone #: (360) 659-6251		
Responsible Official	Name: Brian Bookey Title: President Address: 1930 Merrill Creek Parkway, Suite A Everett, WA 98203 Telephone #: (425) 349-4257, extension 233 FAX #: (425) 349-4336		

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

National Food Corporation maintains an egg processing plant located between Arlington and Marysville, Washington. The process water generated by the plant is discharged to the city of Marysville wastewater treatment plant. In addition, laying hens are housed in six barns immediately to the west of the plant.

A single egg processing line is operated in the plant. The shell egg line has a capacity of 300 cartons per hour. A 140 carton per hour line was formerly located in the plant, but was dismantled during the term of the existing permit. The floor space formerly occupied by the 140 carton per hour line is now used for cold storage of eggs. The 300 carton per hour processing line (including the associated flats washers) has a typical discharge of approximately 2200 gallons per day of wastewater.

The main sources of wastewater in the shell egg plant are:

- *Flat Washing:* Plastic flats are washed in machines with a capacity of sixty gallons each, using water and a detergent product called Quorum Yellow 2. The flat washers are run fifteen hours per operating day. The water in each washer is changed approximately once every four hours. There are four such flat washers in the 300-gallon carton per hour line. Flat washers discharge approximately 450 gallons per day each.
- Shell Egg Washing: Shell eggs (unbroken eggs) are washed with a product called Super Clean Shell which contains sodium hydroxide, trisodium-tripolyphosphate, poly-oxamer, sodium chloride, and water. Shell egg washers are drained at noon and at the end of every working day. In addition, the egg shell washers have a continuous overflow to prevent rapid buildup of dirt particles. The shell egg washer overflow and draindown comprise approximately 1580 gallons per day.
- Broken Eggs and Floor Washings: The company has adopted the policy of picking eggs off the floor or machinery shortly after they are accidentally broken. The floors are hosed down only after the main part of the broken eggs has been picked up. Grated trenches are located on the floors in the processing areas. Wastewater and egg product which reach the trenches are screened prior to discharge from the trenches to the sumps. Eggs with broken shells are placed in five-gallon buckets and stirred. The contents of the five-gallon buckets are then transferred to fifty-five gallon drums. This inedible (not for human consumption) liquid is later screened to remove shells and is shipped in tank trucks to pet food manufacturers. Eggs with broken shells, but which still have the membranes intact, are sent to the breaking room as they are still classified as edible product. Floor cleanup in the shell egg plant requires approximately 200 gallons per day.

DESCRIPTION OF THE EGG BREAKING PLANT

The average discharge of waste water from the breaking plant, including the associated packaging operation, is approximately 40,000 gallons per day. The main sources of waste water in the egg breaking plant are:

- Egg Washing Machine in the Transfer Room: These washers function in a similar manner to the egg washers in the egg washing plant, as described in the previous section. Microclean, which includes iodine and phosphoric acid as ingredients, is used for washing of the shells. However, unlike the cleaning operation in the shell egg plant, oil is not applied to the shells, as the next operation involves breaking the shells.
- Breaking Machine: Cleaned eggs are next sent through the breaking machine. Egg liquids occasionally spill to the floor from the breaking machines and transfer facilities. The company policy is to clean up any such spillage prior to hosing down of the floor. The total flow related to the breaking machine, loader, and washer is approximately 24,000 gallons per day.
- Storage Tank Washdown: Approximately 2500 gallons per day is used for washdown of the storage tanks associated with the breaking plant.
- Pasteurizer Washdown: Clean-in-Place (CIP) procedures are used for washdown of the pasteurizer. These operations, including chasing water, result in generation of approximately 5000 gallons of wastewater per day. Chasing water associated with the pasteurizer cleaning operations is high strength and is routed to the pretreatment system. National Food has determined that the CIP water (exclusive of the chasing water) associated with pasteurizer cleaning is low strength. A phosphate-free sodium hydroxide solution is used as the CIP solution. The CIP water associated with the pasteurizer is routed to the pretreatment system. Waste water associated with raw product line CIP and pasteurized product line CIP bypasses the pretreatment system.
- Packaging Plant: Approximately 7500 gallons per day are generated from washing down the package plant associated with the breaking line. Approximately 750 gallons per day of sanitizer are used for the washdown of the packaging plant.

Shells from the egg breaking operation are transferred into a room outside the breaking room and augured into a centrifuge. The liquid from the centrifuge is added to the inedible egg liquids to be used in pet food. The egg shell removed from the centrifuge is incorporated into the chicken manure as a source of calcium.

TRUCK SHOP

A garage used for maintenance of trucks is located at the back of the property. The floor of the building contains a grated trench connected to a three-compartment oil/water/solids separator. However, the separator has not been plumbed to either the storm or sanitary sewer. At the time of drafting the permit issued in 1995, the plan had been to hook the separator up to the sanitary sewer to enable washing of trucks on-site. Therefore, the permit issued in 1995 included an authorization to discharge from the sump, with a flow limitation of 1000 gallons per day and oil and grease limitation of 200 mg/L. As the proposed connection to the sanitary sewer was never implemented, the discharge from the truck shop was not included in the permit issued November 30, 2000, and is not anticipated to be included in the proposed permit.

Storage of vehicle maintenance liquids (e.g. motor oil, hydraulic fluid, brake fluid, etc.) is in drums located nearby the grated trench. The storage area would need to be bermed or moved of the oil/water/separator is ever connected to the sanitary sewer. Radiator coolant is retained in drums and sent to a recycler.

National Food Corporation purchased and is currently installing a watercycling system for water generated from equipment washing. The company has no plans to connect to the sanitary sewer.

DISINFECTANTS

Disinfectants used on-site include hypochlorite, hydrogen peroxide, and quaternary ammonia. These disinfectants appear to be used in sufficiently limited amounts that they are unlikely to cause adverse effects at the POTW. The City of Marysville has reported some excess chlorine demand attributable to ammonia. There is no evidence at this time that quaternary ammonia compounds are responsible for this effect.

PRETREATMENT WORKS

The main components of the wastewater pretreatment works include a twenty thousand gallon holding tank and two-each mixing/settling tanks. The mixing/settling tanks are operated on a batch basis. The plant also employs a rectangular tank used for sludge dewatering. Following dewatering, sludge is directed to a frame dewatering system. The plant manager has observed that the filter drying system is the limiting step in the process with regard to capacity.

The plant also includes a tank which was originally designed as an aeration (or potentially ozonation) polishing tank. This tank is no longer being used.

Two tanks appearing in the original system were intended to be employed as clarifier tanks. National Food determined from operating experience that this step had little effect on BOD or TSS removal, and abandoned this step.

Another change made from the original procedure is that clean-in-place (CIP) water used in the pasteurization plant is not being sent though the pretreatment system. Mr. Bookey told me that this waste water had been determined to have a negligible BOD component. The CIP water is nevertheless being sampled after it mixes with the pretreated wastewater.

MANHOLES, SUMPS, AND SAMPLING SITES

Effluent from the shell egg and breaking plant operations is directed to the pretreatment system located outside of the building. However, clean-in-place water bypasses the pretreatment system. The sample point now used by National Food is the manhole on the corner of the pretreatment system slab. The clean-in-place water is introduced upstream of the sampling point.

The existing and proposed permits require that National Food conduct flow-proportional sampling for BOD₅ and TSS. The City of Maryville continues to employ time-proportional sampling.

PERMIT STATUS

A state waste discharge permit for this facility was issued May 10, 1995. On June 10, 1995, the permit was modified at the request of the Permittee to reduce the maximum flow limitation at Sample Point 001 from 122,000 gallons per day to 99,000 gallons per day.

An application for permit renewal was submitted to the Department on October 22, 1999. A Notice of Temporary State Permit was sent by the Department on January 5, 2000. The existing permit for this facility was issued on November 30, 2000, with an effective date of December 1, 2000. The existing permit bears an expiration date of June 30, 2004.

An application for renewal of the existing permit was received on January 21, 2004. However, the application was not complete due to absence of the signature of an authorized representative of the City of Marysville. The City's signature was received on June 22, 2004.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

Following issuance of an NOV on March 22, 2002, the Department issued a Notice of Penalty on May 3, 2002 to National Food Corporation for the violations indicated in the table below. The existing permit became effective on December 1, 2000. Therefore, violations listed for monitoring periods prior to that date are associated with violations of the previous permit.

Violations of Permit Effluent Standards Cited in			
Notice of Penalty Issued on March 5, 2002			
Monitoring Period	Pollutant Parameter	Value Reported on Discharge Monitoring Report (mg/L)	Limitation in Permit (mg/L)
March 2000	BOD ₅ , maximum daily	1539	300
April 2000	BOD ₅ , maximum daily	475	300
May 2000	BOD ₅ , maximum daily	368	300
June 2000	BOD ₅ , maximum daily	441	300
August 2000	BOD ₅ , maximum daily	590	300
September 2000	BOD ₅ , maximum daily	1125	300
October 2000	BOD ₅ , maximum daily	689	300
November 2000	BOD ₅ , maximum daily	325	300
December 2000	BOD ₅ , maximum daily	718	300
January 2001	BOD ₅ , maximum daily	738	300
February 2001	BOD ₅ , maximum daily	1551	300
March 2001	BOD ₅ , maximum daily	506	300
April 2001	BOD ₅ , maximum daily	431	300
May 2001	BOD ₅ , maximum daily	400	300
May 2001	TSS, maximum daily	392	350
June 2001	BOD ₅ , maximum daily	559	300
August 2001	BOD ₅ , maximum daily	778	300
September 2001	BOD ₅ , maximum daily	456	300
October 2001	BOD ₅ , maximum daily	362	300
November 2001	BOD ₅ , maximum daily	491	300
December 2001	BOD ₅ , maximum daily	537	300

In addition, the Notice of Penalty addressed late submittal of discharge monitoring reports for the following reporting periods:

January 2000

February 2000

March 2000

April 2000

May 2000

June 2000

July 2000

August 2000

September 2000

October 2000

November 2000

December 2000

January 2001

February 2001

March 2001

April 2001

May 2001

June 2001

July 2001

August 2001

September 2001

October 2001

November 2001

A Notice of Violation was issued by the Department to National Food Corporation on March 28, 2003. The Notice of Violation was issued for the following violations of effluent standards:

Violations of Permit Effluent Standards Cited in Notice of Violation Issued on March 28, 2003				
Monitoring Period	<u> </u>		Limitation in Permit Issued November 30, 2000	
January 2002	Flow, maximum two-day average (gallons per day)	55,020	49,900	
January 2002	TSS, maximum daily (mg/L)	498	350	
February 2002	BOD ₅ , maximum daily (mg/L)	375	300	
February 2002	BOD ₅ , maximum daily (mg/L)	489	350	
March 2002	BOD ₅ , maximum daily (mg/L)	372	300	
May 2002	BOD ₅ , maximum daily (mg/L)	316	300	
June 2002	BOD ₅ , maximum daily (mg/L)	424	300	
July 2002	BOD ₅ , maximum daily (mg/L)	359	300	
August 2002	BOD ₅ , maximum daily (mg/L)	649	300	
September 2002	BOD ₅ , maximum daily (mg/L)	380	300	
October 2002	BOD ₅ , maximum daily (mg/L)	596	300	
November 2002	BOD ₅ , maximum daily (mg/L)	775	300	
November 2002	TSS, maximum daily (mg/L)	485	350	
December 2002	BOD ₅ , maximum daily (mg/L)	341	300	

As the Permittee continued to violate effluent standards contained in the permit, the Department issued a Notice of Penalty on January 23, 2003. The Notice of Penalty was issued for some of the violations cited in the March 28, 2003, Notice of Violation, as well as additional violations. The violations cited in the January 23, 2004, Notice of Penalty are listed in the table below:

Violations of Permit Effluent Standards Cited in Notice of Penalty Issued on January 23, 2004			
Monitoring Period	Pollutant Parameter	Value Reported on Discharge Monitoring Report	Limitation in Permit issued November 30, 2000
October 2002	BOD ₅ , maximum daily (mg/L)	596	300
November 2002	BOD ₅ , maximum daily (mg/L)	775	300
November 2002	TSS, maximum daily (mg/L)	485	350
December 2002	BOD ₅ , maximum daily (mg/L)	341	300
January 2003	TSS, maximum daily (mg/L)	488	350
January 2003	BOD ₅ , maximum daily (mg/L)	799	300
June 2003	TSS, maximum daily (mg/L)	403	350
July 2003	BOD ₅ , maximum daily (mg/L)	692	300
July 2003	TSS, maximum daily (mg/L)	442	350

WASTEWATER CHARACTERIZATION

The effluent characteristics based on the values submitted on monthly discharge monitoring reports is shown in the table below. The Permittee is required to submit the maximum value recorded each month. Therefore the minimums, maximums, and averages are those for the maximum monthly value as reported by the Permittee.

Characterization of Wastewater based on Monthly Maximum Values Reported by the Permittee on Discharge Monitoring Reports for Flow, BOD ₅ , and TSS				
Pollutant Parameter	Calendar Year	Minimum	Average	Maximum
Flow, maximum two-day average (gallons per day)	2002 (n=12)	46220	48080	49560
	2003 (n=12)	43600	48384	51515
	2004 (n=2)	46100	46343	46585
BOD ₅ , maximum	2002 (n=12)	261	441	775
daily (mg/L)	2003 (n=12)	183	402	799
	2004 (n=2)	311	325	338
TSS, maximum daily (mg/L)	2002 (n=12)	99	177	485
	2003 (n=12)	99	306	776
	2004 (n=2)	140	165	190

SEPA COMPLIANCE

The National Food site is an existing site. The renewal of a permit does not require submittal of a SEPA checklist.

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). Compliance with the BOD_5 and TSS limitations set forth by the City of Marysville is expected to result in effluent quality at least consistent with technology-based permit limitations. In addition, pH limitations are proposed to be introduced in the permit. The proposed pH limitations of 5.0 minimum and 11.0 maximum are based on WAC 173-216-060.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect the City of Marysville POTW from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. The BOD₅ and TSS limitations in the existing permit are based on local limits established by the City of Marysville and codified in ordinance (Chapter 14.05.020, Marysville Municipal Code). At the time of the drafting of this permit, the City of Marysville was in the process of changing its ordinance to include a limit of 750 mg/L for BOD₅ and a limit of 750 mg/L for TSS. The City of Marysville amended its ordinance to include the higher BOD₅ and TSS limitations in June 2004.

COMPARISON OF LIMITATIONS WITH THE EXISTING PERMIT ISSUED NOVEMBER 30, 2000

A comparison of limitations appearing in the existing permit with those in the proposed permit is shown in the table below:

Comparison of Limitations Appearing in the Permit Issued November 30, 2000, with Limitations in the Proposed Permit				
	Limitations in Permit Issued November 30, 2000			nitations in osed Permit
Pollutant Parameter	Maximum Two-day Average	Maximum Daily	Maximum Two-day Average	Maximum Daily
Flow, process (gpd)	49,900	N/A	99,900	N/A
BOD_5 (mg/L)	N/A	300	N/A	750
TSS (mg/L)	N/A	350	N/A	750
pH (standard pH units)	N/A	N/A	N/A	Not outside the range of 5.0 to 11.0

pH adjustment is necessary for optimum operation of the pretreatment system. The pH limitations and monitoring requirements were added to the proposed permit because of the potential for pH adjustment chemicals to be added at inappropriate amounts due to failures in process controls.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Conditions S1 and S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring. Monitoring for BOD₅ and TSS is proposed to be required on a weekly basis.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges [WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)].

OPERATIONS AND MAINTENANCE

The proposed permit contains Condition S5 as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC), and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from leachate of solid waste.

This proposed permit requires, under the authority of RCW 90.48.080, that the Permittee update the solid waste plan designed to prevent solid waste from causing pollution of the waters of the state and submit it to the Department. The proposed permit also includes the requirement that the Permittee review the plan periodically and update it as necessary.

NONROUTINE AND UNANTICIPATED DISCHARGES

Occasionally, this facility may generate wastewater which is not characterized in their permit application because it is not a routine discharge and was not anticipated at the time of application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are typically clean waste waters but may be contaminated with pollutants. The permit contains an authorization for nonroutine and unanticipated discharges. The permit requires a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this waste water and opportunities for reuse, Ecology may authorize a direct discharge to the municipality, require the waste water to be placed through the facilities wastewater treatment process or require the water to be reused.

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals or contaminated waste water that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under Section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to periodically review and update as necessary the existing spill plan and submit any such updates to the Department.

SLUG DISCHARGE CONTROL PLAN

The Department has determined that the Permittee has the potential for a batch discharge or a spill that could adversely effect the POTW; therefore, a slug discharge control plan is required [40 CFR 403.8 (f)]. Maintenance of an adequate slug discharge control plan is required in the proposed permit.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes, or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with pretreatment standards or requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for a period of five (5) years.

REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations (http://www.ecy.wa.gov/laws-rules/index.html)

Permit and Wastewater Related Information (http://www.ecy.wa.gov/programs/wq/wastewater/index.html)

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page one of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public Notice of Application (PNOA) was published on June 28, 2004, and July 5, 2004, in the *Everett Herald* to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department published a Public Notice of Draft (PNOD) on June 28, 2004, and July 5, 2004, in the *Everett Herald* to inform the public that a draft permit and fact sheet were available for review. Interested persons were invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments were mailed to:

Water Quality Permit Coordinator WA State Department of Ecology Northwest Regional Office 3190 – 160th Avenue SE Bellevue, WA 98008-5452

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30)-day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (425) 649-7025, or by writing to the address listed above.

APPENDIX B—GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)—Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅—Determining the biochemical oxygen demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling—A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling—A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Construction Activity—Clearing, grading, excavation, and any other activity which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, or industrial buildings; and demolition activity.

Continuous Monitoring—Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short a period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business; from the development of any natural resource; or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference—A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)—The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through—A discharge which exits the POTW into waters of the state in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of state water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User—A potential significant industrial user is defined as an industrial user which does not meet the criteria for a significant industrial user, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day; or
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass-through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL)—A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)—

- 1) All industrial users subject to categorical pretreatment standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of nondelegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a nonroutine, episodic nature, including but not limited to an accidental spill or a noncustomary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids—That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)—Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.